FREIGHT NEWS

Freight Transportation Profile—Washington Freight Analysis Framework

Understanding future freight activity is important for matching infrastructure supply to demand and for assessing potential investment and operational strategies. To help decisionmakers identify areas in need of capacity improvements, the U.S. Department of Transportation developed the Freight Analysis Framework (FAF), a comprehensive national data and analysis tool, including county-to-county freight flows for the truck, rail, water, and air modes. FAF also forecasts freight activity in 2010 and 2020 for each of these modes. Information about the methodology used in developing FAF is available on the Office of Freight Management and Operations' website www.ops.fhwa.dot.gov/freight.

The U.S. freight transportation network moves a staggering volume of goods each year. Over 15 billion tons of goods, worth over $9 trillion, were moved in 1998. The movement of bulk goods, such as grains, coal, and ores, still comprises a large share of the tonnage moved on the U.S. freight network. However, lighter and more valuable goods, such as computers and office equipment, now make up an increasing proportion of what is moved. FAF estimates that trucks carried about 71 percent of the total tonnage and 80 percent of the total value of U.S. shipments in 1998. By 2020, the U.S. transportation system is expected to handle about 23 billion tons of cargo valued at nearly $30 trillion.

Washington

Table 1 presents information on freight shipments that have either an origin or a destination in Washington. As shown in the table, trucks moved a large percentage of the tonnage and value of shipments, followed by rail (tonnage) and air (value). Figures 1 and 2 show freight flows on the highway and rail modes.

Truck traffic is expected to grow throughout the state over the next 20 years. Much of the growth will occur in urban areas and on the Interstate highway system (Figures 3 and 4). Truck traffic moving to and from Washington accounted for 16 percent of the average annual daily truck traffic (AADTT) on the FAF road network. Approximately 21 percent of truck traffic involved in-state shipments, and 7 percent involved trucks traveling across the state to other markets. Nearly 57 percent of the AADTT were not identified with a route-specific origin or destination.

Table 2 shows the top five commodity groups shipped to, from, and within Washington by all modes. The top commodities by weight are lumber or wood products and nonmetallic minerals. By value, the top commodities are transportation equipment and food or kindred products.

Table 1. Freight Shipments To, From, and Within Washington: 1998, 2010, and 2020

WASHINGTON	Tons (millions)			Value (billions $)		
	1998	2010	2020	1998	2010	2020
State Total	466	652	834	353	687	1,167
By Mode						
Air	<1	1	2	42	100	180
Highway	307	444	571	267	513	870
Other[a]	11	12	14	2	2	3
Rail	85	126	171	29	51	84
Water	63	69	76	14	21	30
By Destination/Market						
Domestic	378	516	645	278	516	854
International	88	136	189	75	171	313

Note: Modal numbers may not add to totals due to rounding.

[a] The "Other" category includes international shipments that moved via pipeline or by an unspecified mode.

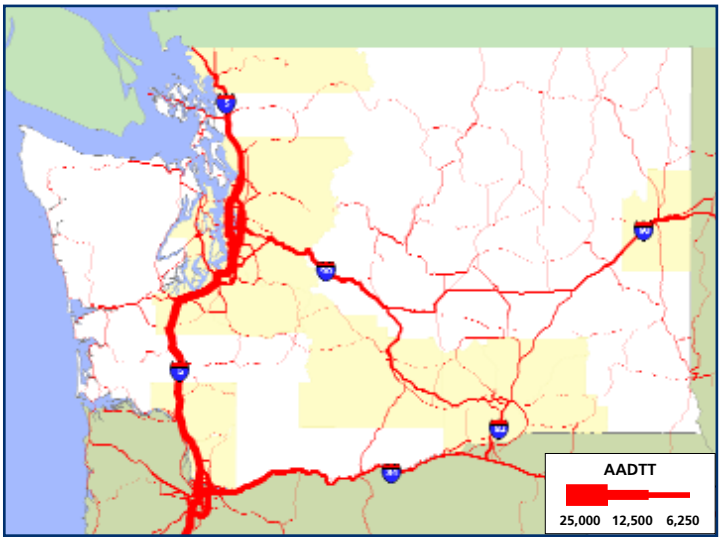
Figure 1. Freight Flows To, From, and Within Washington by Truck: 1998 (tons)

Federal Highway Administration

Figure 2. Freight Flows To, From, and Within Washington by Rail: 1998 (tons)

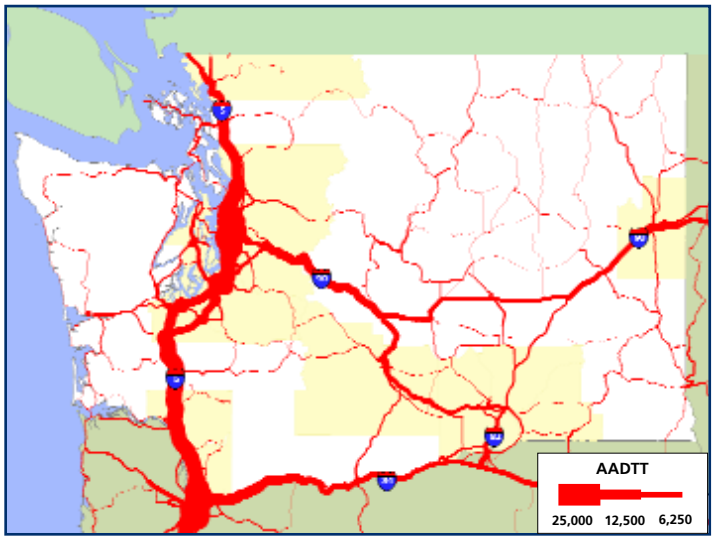
Federal Railroad Administration

Figure 3. Estimated Average Annual Daily Truck Traffic: 1998



Federal Highway Administration

Figure 4. Estimated Average Annual Daily Truck Traffic: 2020



Federal Highway Administration

Table 2. Top Five Commodities Shipped To, From, and Within Washington by All Modes: 1998 and 2020

Commodity	Tons (millions)		Commodity	Value (billions $)	
	1998	2020		1998	2020
Lumber/Wood Products	72	113	Transportation Equipment	42	98
Nonmetallic Minerals	69	87	Food/Kindred Products	34	138
Farm Products	63	114	Freight All Kinds[a]	28	89
Food/Kindred Products	38	92	Machinery	28	101
Freight All Kinds[a]	33	67	Chemicals/Allied Products	27	97

[a] The "Freight All Kinds" category refers to general freight shipments.

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A series of FAF products are available on the website noted below. FAF outputs include freight flow maps for states, modes, and gateways; detailed databases on traffic flows and commodity movements; information on the methodologies used to develop FAF; and forecast assumptions.

The U.S. Department of Transportation, Bureau of Transportation Statistics (BTS) is also developing a series of state transportation profiles. For more information and to obtain a copy of the BTS reports, please call 202-366-DATA.

U.S. Department of Transportation

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